## REMARKS

Claims 1-4, 6, 8, 10-12 and 16-32 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### ELECTION/RESTRICTIONS

Pursuant to the Examiner's instruction claims 13-15 have been canceled.

### REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-4, 6, 8, 10-12 and 16-32 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Sullivan et al. (U.S. Pat. No. 5,309,365) in view of Tessarolo (U.S. Pat. No. 6,328,949).

Sullivan and Tessarolo either individually or in combination do not teach or suggest all of the limitations of independent claims 1, 8, 16, 19, 23 and 29. One of the most apparent of several distinctions between the references and the invention is that neither Sullivan nor Tessarolo teach or suggest any <u>ability to calculate a structure for a 3-dimensional artificial fingernail from a combination of data representing a 3-dimensional surface of a natural fingernail with data representing the artificial fingernail style or design</u>. Importantly it is this data for the entire structure of the 3-dimensional artificial fingernail that is converted into machine codes for making the artificial fingernail.

In the Advisory Action the Examiner disagrees and states that "Tessarolo suggest scanning into computer a three dimensional digitized image (Col. 4, lines 5-8)."

The section of Tessarolo cited Examiner states, "The present invention contemplates the possibility of scanning into computer a three dimensional digitized image of the nail top surface 30." This section of Tessarolo says nothing about a 3-dimensional shape of an *artificial* fingernail. More importantly, Tessarolo says nothing about combining <u>data representing a 3-dimensional surface of a natural fingernail with data representing the artificial fingernail style or design to produce a custom fitting 3-dimensional artificial fingernail</u>. There is simply no teaching, suggestion or inherency in Tessarolo for combining data for a natural fingernail with data for a 3-dimensional design of an artificial fingernail to create a custom fitting 3-dimensional artificial fingernail.

Neither Sullivan nor Tessarolo teach or suggest a calculation module as included in claim 1. In the Advisory Action the Examiner disagrees and states that "[w]ith respect to the calculation module, Tessarolo teaches that the digitized image can be corrected for size (Col. 4, lines 37-41), and therefore a calculation takes place." This section of Tessarolo says nothing about "a calculation module within the design system for calculating a three-dimensional design of the artificial fingernail from the three-dimensional topography of the natural fingernail and the selected parameters" as provided in claim 1. Instead, this section of Tessarolo states, "[r]eferring now again to FIGS. 1 through 6, once digitized nail image 20 is in computer 18 it can be imported into a graphics program such as Corel Draw® 7 and corrected for size as described above and then saved onto disc for future customer reference."

A graphics program for correcting the size of a nail covering is not the same as a calculation module for calculating a 3-dimensional design of an artificial fingernail from the 3-dimensional topography of the natural fingernail and a design of the artificial

fingernail. Importantly, in Tessarolo there is simply no teaching or suggestion of how a graphics program can be used to calculate a 3-dimensional artificial fingernail.

Further, claim 1 requires that the calculation module be within the design system where the design system offers selection of parameters for an artificial fingernail comprising length, and 3-dimensional style of the artificial fingernail. Rather than teaching or suggesting a combining of data, Tesarolo only offers the ability to manipulate data of a digitized nail image. Manipulating nail image data however does not inherently mean that it is combined with data for the selected parameters for an artificial fingernail to create a 3-dimensional artificial fingernail.

Further, Sullivan is directed to mechanically measuring a fingernail to match it to a preformed "blank" and then cutting the blank periphery to fit the fingernail (*See* Col. 4, Lines 15-18, Col. 5, Lines 1-3). Tessarolo is directed to flexible fingernail coverings (*See* Figs. 4, 5, and 6). Therefore, neither Sullivan nor Tessarolo has a need much less teaches or suggests combining data of a 3-dimensional fingernail surface with data for a 3-dimensional fingernail design to create data for the 3-deminsonal artificial fingernail that can be converted into machine codes for machining. For at least this reason the independent claims of the invention are distinguishable.

For example, claim 1 of the invention provides "**a calculation module within the design system for calculating a three-dimensional design of the artificial fingernail from the three-dimensional topography of the natural fingernail and the selected parameters**." The Office Action does not mention how Sullivan or Tessarolo teach or suggest a calculation module of claim 1. In fact, neither Sullivan nor Tessarolo

teach or suggest a calculation module within a design system since no such module is needed for calculating a 3-dimensional design of the artificial fingernail.

Claim 8 has been amended to further accentuate this point. Claim 8 provides "a measuring and design system for receiving the two-dimensional grid image of the natural fingernail, calculating x, y, and z coordinates for the natural fingernail and **calculating a design of the artificial fingernail in three dimensions from the x, y, and z coordinates and a selected artificial fingernail style** wherein at least a portion of the artificial fingernail will fit the natural fingernail wherein the design of the artificial fingernail will be converted into machine data." Again, neither Sullivan nor Tessarolo teach or suggest calculating a design of a 3-dimensional artificial fingernail from coordinates for the natural fingernail and a selected style of the artificial fingernail.

Claim 16 has also been amended to better clarify this distinction. Claim 16 provides for "**calculating in three dimensions the artificial fingernail using the x, y, and z data points of the natural fingernail and data for an artificial fingernail design** to create a custom fit of the artificial fingernail on the natural fingernail." Neither Sullivan or Tessarolo teach or suggest this.

Claim 19 provides for "**calculating a three-dimensional shape of the artificial fingernail from the x, y, and z data points of the natural fingernail and the parameters for the artificial fingernail**." Again, neither Sullivan or Tessarolo teach or suggest this. Even the sections of Sullivan cited by the Examiner in the Office Action do not support this.

The Examiner points to Sullivan at col. 5, line 41 to col. 6, line 24 and col. 3 line 46 to col. 4, line 36 in support of the rejection. However, these sections support that

there is not a "calculation" of a shape of an artificial fingernail from data for the natural fingernail and parameters for the artificial fingernail. Specifically, Sullivan provides that "[e]ach of the nail tip blanks used has a given radius of curvature and the radius of the blank selected must match the radius determined by the z axis probe 46 for the involved finger. Thus, once this radius is determined, the system may display the calculated radius R on the display screen 10 for reference by the user in selecting the appropriate blank type (emphasis added)." (*See* Sullivan at col. 4, lines 12-18). Clearly, in Sullivan the measuring of the natural fingernail is used to select an appropriate blank. In Sullivan there is no "calculating" a three-dimensional shape of the artificial fingernail from data points of the natural fingernail and the parameters for the artificial fingernail.

Claim 23 provides for "**creating a three-dimensional data structure for the artificial fingernail wherein the data structure comprises the x, y, and z data points that defines the surface of the natural fingernail and the design for the artificial fingernail; and converting the three-dimensional data structure into machine data for cutting the artificial fingernail our of a material**." Again, neither Sullivan or Tessarolo teach or suggest this and even the sections of Sullivan cited by the examiner in the Office Action do not support this.

The Examiner points to Sullivan at col. 5, line 41 to col. 6, line 24 and col. 3 lines 46 to 68 and Fig. 7 in support of the rejection. However, these sections support that there is no 3-dimensional data structure comprising x, y, and z data points for the natural fingernail and the design for the artificial fingernail. As discussed above these sections support that measurement data is used to select an appropriate blank. In Sullivan Fig. 7 only shows a display screen for displaying different nail sizes and

shapes. (*See* Sullivan at col. 5, lines 59-65). In Sullivan there is simply no teaching or suggestion of combining x, y, and z data points for a natural fingernail with anything displayed in Fig. 7 to provide a data structure of a 3-dimensional artificial fingernail.

The above analysis would also apply to claim 29 which provides for "creating a plurality of three-dimensional data structures one for each of the plurality of artificial fingernails wherein each data structure comprises the data that defines one of the surfaces of each of the plurality of natural fingernails and the design for the artificial fingernail." Neither Sullivan nor Tessarolo teaches or suggests this.

Additional distinguishing features between the claims and the cited references are apparent. Several additional of these distinguishing features were already discussed in Applicants' response dated September 28, 2005 to an Office Action mailed June 28, 2005. Each of these additional bases for distinguishing the claims from this cited references are incorporated herein as if fully rewritten.

Finally, the examiner suggests that it would be obvious to combine the system taught by Sullivan with the scanning system taught by Tessarolo. However, there would be no motivation to make such a combination since in Sullivan the system is intended to use preformed blanks that are matched to a measured fit of the natural fingernail. The matching of blanks cannot be done better with any purported scanning system taught by Tessarolo. Therefore, there is no reason to make this combination.

Further, Tessarolo fails to enable how data from scanning a fingernail can be used other than for displaying the fingernail or to cut in 2-dimensions a material for a fingernail cover. The fingernail cover of Tessarolo is not the same as a 3-dimensional artificial fingernail provided by the invention.

Finally, even if the combination of Sullivan and Tessarolo can be made the resulting system still can only be used to aid in selecting preformed blanks. There is no ability to create 3-dimensional artificial fingernails from the combined data for a natural fingernail with a style of an artificial fingernail and then convert this data into machine codes for machining a 3-dimensional artificial fingernail.
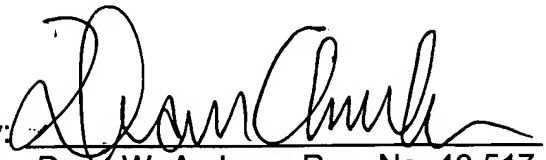
Since each of the independent claims are distinguishable from the cited references then each of the dependent claims are also distinguishable from the cited references. Therefore, Applicants respectfully request that the Examiner reconsider and withdraw the rejections under 35 U.S.C 103(a) of claims 1-4, 6, 8, 10-12, and 16-32 as allegedly being anticipated by Sullivan in view of Tessarolo.

## CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

By: _[signature]_
Dean W. Amburn, Reg. No. 46,517

Dated: May 1, 2006

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

DWA/jm